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Splitting the *sdm.n=f*? A Discussion of Written Forms in Coffin Texts

Part 2

Summary: The paper discusses the written forms of *II.red* in Coffin Texts adduced by Wolfgang Schenkel in support of his hypothesis of two morphologically distinct forms of the *sdm.n=f*. Also examined are the case of *ult.n non-II.red*, which had only a secondary role in Schenkel's original proposal, and the case of the high-frequency verb *wnn*, which is special. The conclusion is that none of these written forms supports the hypothesis of two distinct forms of the *sdm.n=f*, just as none contradicts it. In the course of the argument, various issues of broader interest are touched upon: the representation of verbal morphology in writing, the individual verbs (notably *ngigi/ngg* “cackle,” originally a N-stem based on an onomatopoeitic segment), the morphology of *wnn*, and aspects of the dynamics of textual variation in Coffin Texts (notably the extraordinarily complex case afforded by CT I 73c–74f; Spell 24).

Keywords: CT I 73c–74f (Spell 24) – logography in verbal inflection – *ngg* “cackle” – *sdm.n=f* – textual variation in Coffin Texts – verbal morphology – *wnn*

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1.7 Alternations of short and long written stems of the same verb – 1: *wrr.n* ~ *wr.n*

In Coffin Texts, only two verbs of the *II.red* display both the short and the long written stems, *wrr* “be great” and *ngg* “cackle” (for an altogether different case, also displaying a contrast between two written stems, below, 3: *wnn*). *Wrr* and *ngg* afford separate discussion because the evidence associated with the former, if taken at face value, might superficially seem to contradict Schenkel's hypothesis (this sub-section), while the evidence associated

with the latter would at first sight seem to confirm that same hypothesis (1.8–9).

A. Except in one passage, *wrr* has the long written stem, *wrr.n* (3–4)¹. All three passages are from “emphatic” environments; the long written stem standing for a *sdm.n=f_x* (WvR´vRnv-) is here expected under both the competing hypotheses alike. In the fourth passage, CT II 268/9e, *wrr* has the short written stem (*wr.n*) in most witnesses (in details below, B). This is also from an “emphatic” environment as is implied by the *figura etymologica*: *wr.n=i m sf mm wrw* “I have become great yesterday among the great ones.” A short written stem in an “emphatic” environment is contrary to expectation under either of the competing hypotheses alike. All written forms of *wrr* are thereby similarly neutral as to which of the two hypotheses are correct; this is exactly Schenkel's assessment as well: with respect to the main issue, the discussion may stop here.

B. With a view on the parameters that can be at play in alternations of written forms in Coffin Texts, the one passage that unexpectedly has the short written stem standing for a *sdm.n=f_x* is discussed further. As also observed by Schenkel, this is to be related to the thoroughly complex textual tradition of the passage in question². The details are as follows:

- (s) Textual variation in the verb in CT II 268/9e:
 - (α) Four witnesses have a different verb: *ʿj.n=i* (S2P, S3P, S1Ta, S2C).
 - (β) Seven witnesses have a logographic spelling: A19.n=i/N (B2Bo, B4Bo, B3C, B4La, B4Lb, S1Ca, S1Cb).

¹ CT II 268/9e B1C, M38C; CT IV 178j G1Be; CT IV 180c G1T; see Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 25.

² Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 26.

- (γ) Six witnesses have a spelling <G36 *r n*>, commonly interpreted as *wr.n=i/N* (below, D) (SqCa, SqCb, B9C, B2P, B1L, B17C).
- (δ) Only one witness has the long written stem as expected, *wrr.n=i* (B1C).
- (ε) One witness is corrupt, with <G5 *r r*>[...] (M38C); this may imply an underlying long written stem in the tradition on which this witness draws (<*Hr*>{*wr*}*r.n=i*).

C. Of these variants, “die im allgemeinen besseren (und auch einige im allgemeinen schlechtere) Textzeugen”³ have (α) or (β): the discussion may thus begin with these. In the (β)-witnesses, the verb is spelled logographically, with the sign A19. Based on the “phonographischen Schreibungen anderer Textzeugen”, this can be read as *wr*⁴, although the rarer reading as *ʿ3* is possible as well⁵. Either way, the use of a logographic spelling with the sign A19 implies a slightly *recherché* writing. The original reading may well have been *wr*, as in the (γ)-(ε)-witnesses. The writing with A19, as in the (β)-witnesses, would then have been reinterpreted as *ʿ3*, leading to the readings as in the (α)-witnesses (all from Siut; note that two other Siut witnesses have A19). Alternatively, the reverse may have happened: *ʿ3*, as in the (α)-witnesses, may have been the original reading. The slightly sportive writing with A19, as in the (β)-witnesses, may have been reinterpreted to yield *wr*, as in the (γ)-(ε)-witnesses (note that (β) includes witnesses from both Bersheh and Siut, as (γ) and (δ) also do).

D. Turning to the issue of short and long written stems, a first observation is that the spellings as in (β) do not in themselves imply a short written stem, even if the verb *wr* is meant: the spelling with A19 is logographic, and a word is thus represented, not a word-form. Strictly speaking, witnesses with the short written stem are therefore only the ones in (γ), not thirteen⁶ but only six. These

stand against one witness (δ), or perhaps two (counting the corrupt (ε)), with the long written stem.

There is a possibility that in the sequence of signs <G36 *r n*> in the (γ)-witnesses, *r* is not the phonetic complement of G36, but stands for the second root consonant itself, reduplicated. Rather than as *wr^r.n*⁷, i.e. *wr.n*, the reading should then be as *wrr.n*: the form would be the long stem expected under either hypothesis and no emendation would be required. The possibility has to be raised, not because it would fit expectations better, but in view of a series of spellings of other words of the root *wrr* in Coffin Texts⁸. Mostly in compound expressions or bound collocations, such words can appear with uncomplemented G36 in at least one among parallel witnesses (> 100 cases); the noun *wr* “great one” notably can be written with uncomplemented G36. The *wrr(y)t*-crown is also documented with only one *r* written, in textual variation with the more common spelling with two *rs*⁹. Forms of the pseudoparticiple of *wrr* in Coffin Texts have the sequence of signs <G36 *r*> for *wr* in 95% of cases, yet the remaining 5% have uncomplemented G36: the common spelling as *wr^r* (<*wr r*>) thus alternates with the much rarer one as *wr* (<*wr*>)¹⁰.

In assessing the above, the short spellings in compound expressions or bound collocations are least relevant, as these probably represent abbreviated spellings; a similar comment extends to the noun *wr*, where the non-complemented spelling is best interpreted as logographic. More relevant is the case of *wrr(y)t*, because the spelling is neither abbreviated nor logographic and because the noun is itself based on a long stem of *wrr*, as is the expected *sdm.n=f_x* in CT II 268/9e. However, unlike the verb in the passage under discussion, the stem morphology in *wrr(y)t*, a noun, is derivational: no inflectional contrast is carried by the stem; this may have facilitated the short spellings occasionally encountered with *wrr(y)t*. In the case of the pseudoparticiple, the stem is inflectional, but no contrast between a short and a long stem is involved in this category (the stem is always short). *Wrr(yt)* and the pseudoparticiple thus afford only partial parallels to the (γ)-witnesses of CT II 268/9e.

³ Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 26.

⁴ Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 26.

⁵ The reading *ʿ3* is more common with the noun, but attested with the verb as well, if rarely: compare Borghouts, *Egyptian*, vol. II, 15. Wolfgang Schenkel (personal communication, 7/2013) draws my attention to instances noted in Jozef Janssen, *De traditioneele autobiografie voor het nieuwe rijk* (Leiden 1946), 20. Wb. I 161.25 also mentions such spellings, but does not provide examples in the Belegstellen.

⁶ As counted by Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 27–28.

⁷ Following a common convention, superscript expresses that a sign is interpreted as a complement.

⁸ Submitted to discussion by Wolfgang Schenkel during the Workshop on Earlier Egyptian Grammar, Brown University, 29/3/2013.

⁹ CT I 308b; I 308f; IV 317a; VI 306k; VII 42f; VII 337a; VII 432c. All data kindly provided to me by Wolfgang Schenkel in subsequent discussion (p.c., 7/2013).

¹⁰ Based on Wolfgang Schenkel’s unpublished Konkordanz, shown during the aforementioned workshop.

E. The unexpected short written stem of the (y)-witnesses of CT II 268/9e, standing for what based on the construction must be a *sdm.n=f*_X, can thus be accounted for in two ways. Rather than as *wr'.n*, it could be read as *wrr.n*, thereby being a non-standard orthography of the expected verbal form (D). Or the sequence <G36 r> is read as it usually is in unabbreviated spellings, as *wr'*, for a form *wr.n*, then a misspelling for *wr<r>.n* (C). On balance, I find the latter option more likely, because of the overall complex textual tradition of the passage (B): this includes logographic spellings in which the rise of the misspelt *wr<r>.n* finds a natural place (C). If so, CT II 268/9e illustrates how a written form that is contrary to a hypothesis – in the present case, contrary to both competing hypotheses – can arise in textual transmission.

1.8 Alternations of short and long written stems of the same verb – 2: *ngg.n* ~ *ng.n*

The other verb of *Il.red* that displays an alternation of short and long written stems in the *sdm.n=f* in Coffin Texts is *ngg* “cackle”. Here as well, the long stem is common and the short one exceptional: the form is *ngg.n* in almost every instance (9–18)¹¹, while *ng.n* is limited to one passage, CT I 74b (1–4)¹². The numerous instances with the long written stem, pointing to a *sdm.n=f*_X, are from “emphatic” environments and therefore in conformity with both the competing hypotheses (NvG'vGnv-). The one passage with the short stem, on the other hand, is after *iw*, and thus in an indisputably “non-emphatic” environment: the short written stem would point to the hypothesized *sdm.n=f*_Y (NvGG'vnnv-) in conformity with Schenkel’s “split *sdm.n=f* hypothesis” and in contradiction to the “unitary hypothesis”. I first discuss issues to do with the identification of the inflectional class of *ngg* (A), then how representative *ng.n* in CT I 74b is (B). The complex textual tradition of the passage is examined in turn (1.9).

A. That *ngg* “cackle” should belong to *Il.red* at all is not clear. For another verb initially adduced in his discussion of the morphology of the *sdm.n=f* of *Il.red* in Coffin

Texts, *nḥḥ* “be old, endure, survive”, Schenkel has recently noted that this belongs to an altogether different inflectional class, *5rad* (*nḥiḥi*), and is therefore irrelevant to the issue under discussion.¹³ In the case of *nḥiḥi*, the identification of the inflectional class has no further bearing on the main issue because this verb is in Coffin Texts found only in an “emphatic” environment, for which both the competing hypotheses predict the same form of the *sdm.n=f* (1.2). With a view on the discussion of *ngg* to follow, the reasons for the identification of “*nḥḥ*” as a *5rad* may be briefly exposed nonetheless. Schenkel’s reassignment of “*nḥḥ*” to *5rad* follows Allen’s original identification¹⁴, which was based on morphological grounds: (a) a simplex *nḥi* is attested, and (b) the form of the 3ms pseudoparticiple has the long stem *nḥḥ* (Pyr. § 1477d^p; PT 572), while *Il.red* have the short stem. More precisely, *nḥiḥi* is an instance of *n-AB-AB*, i.e. an exponent of a class consisting in *n*-prefixed reduplicated verbs based on biliteral roots.¹⁵ Semantically, *nḥiḥi* expresses an intransitive event of which the subject is the locus, in line with the medial semantics often times associated with Egyptian N-stems¹⁶. In a written form such as *nḥḥ.n* (CT III 393g B1Bo)¹⁷, reduplication therefore reflects a feature of derivational, not of inflectional, morphology.

That “cackle” may itself be *ngigi*, not *ngg*, has been first proposed by Allen as well, on a more cautious tone¹⁸. Unlike for *nḥiḥi*, however, the evidence adduced by Allen is problematic: “*ngi*” in *Wb.* I 348.4–5 is erroneous¹⁹, and the spelling *ng'g'g'* recorded in *Wb.* II 350.9–12, which does not recur in Belegstellen, is Late Egyptian.²⁰ Various other indications, however, strongly speak to the fact that “cackle” is indeed to be set as *ngi-gi*, not as *ngg*, at least originally.

¹³ Schenkel, “Mittelägyptische Grammatik: Von den Texten zu den Texten”, *BiOr* 69 (2012), 31, n. 32.

¹⁴ Allen, *Inflection*, § 746.

¹⁵ For various aspects of this class of verbs, now Pascal Vernus, “Le préformant *n* et la détransitivité: formation *n-C₁C₂C₁C₂* versus *C₁C₂C₁C₂*. À propos de la racine *gm* ‘notion de trituration’”, *LingAeg* 17 (2009), 291–317 (not discussing *nḥiḥi* specifically).

¹⁶ The medial association of the Egyptian N-stem will be developed further in Andréas Stauder, *Voice and Perspective*, in prep.

¹⁷ Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 47, n. 29.

¹⁸ Allen, *Inflection*, § 746 (“is likely”).

¹⁹ *Wb.* II 348.4 gives *ng=i m smn*, which is just CT I 74b under discussion: the reed-leaf *i* belongs to the spelling of the 1sg suffix (as <*i* A1>), not to the stem. *Wb.* II 348.5 is in reference to Ramses IV’s Wadi Hammamat Inscription (#12), 21, a late text, therefore, and one which, moreover, has *ng hrw=f*, not *ngi*.

²⁰ One text has *ng'g'g'*, P. Turin 1791 (BD 17) *ng'g'g'=f m smn*: this is Ptolemaic and therefore of no value for the present discussion.

¹¹ The original table gives a figure “10–19”. Of these, the locus “CT VI 255u” (Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 48, n. 30) is to be subtracted (Uljas, *LingAeg* 18 (2010), 258, n. 25).

¹² Schenkel’s original table gives a figure “1–6”. The author subsequently cites five instances (“Prädikatives und abstrakt-relativisches *sdm.n=f*”, 46, n. 13). Of these, B3Bo is an instance of *iw ng.n* only under emendation: *iw ng{n}'^{DET}<n> n=ṯ {m}' smn*. For textual issues, see below, 1.9.

That the Egyptian word for “cackle”, be this *ngg* or *ngigi*, should be onomatopoeitic in origin is plausible on general grounds. It is made almost certain in view of some more general associations of Egyptian and earlier Semitic N-stems²¹. Among other things, N-stems serve to verbalize segments that are not in themselves well-formed verbal roots (roots that are too short or too long), or are not verbal roots at all. The latter include formations based on various onomatopoeitic segments, e.g., Akkadian *nabaaḥu* “bark (do *buh*)”, *našaaqu* “kiss (do *šiq*)”, etc. N-stems of the type N-AA are unknown in Egyptian, as they are in Semitic, while N-stems formed on reduplicated bi-radical segments (N-AB-AB, e.g., *n-gs-gs* “overflow”) are common in either domain. There is a strong case, therefore, for Egyptian “cackle” being originally *ngigi*, as an exponent of a N-Ai-Ai formation also otherwise documented (e.g., *n-ḥi-ḥi* (above); *n-ki-ki* “swell”²²).

Noteworthy are also variant forms of the stem. In an early Third Intermediate Period version²³ of BD 17 (a passage harkening back to the Coffin Text tradition of Spell 335), *ngng.n=f* is once found; the late date of the document is of course here to be taken into account. Certainly significant are nominal derivations in Coffin Texts, which cannot be accounted for in terms of textual transmission: *ngng* (CT III 207 h) and *ngngn* (CT III 208e), both “cackler”²⁴. The above formations provide a further indication of the lexical nature of reduplication in *ngigi*. That reduplication would extend its scope over the N-prefix itself is also documented in Egyptian²⁵.

A decisive argument is finally given by occasional forms of “cackle” without initial *N*-. An Eighteenth Dy-

nasty version of BD 17 has *gg³=i* in BD 17 (P. Cairo 51189: Iuia)²⁶, while *Amduat* IV 48 has *mi ḥrw gg n bik* “like the cackling voice of a falcon.”²⁷ Most famous, and from a pre-New Kingdom manuscript, is *ḥ^c.n p³ smn ḥ^c ḥr g³g³* “Then the Nilegoose stood up and begun to gaggle” (Cheops’ Court 8.23). Genuine *I.n* (such as *ndm*, *nḥm*, etc.) do not have alternant forms in which their first root consonant would for some reason be dropped; N-prefixed stems of the type *n-AB-AB*, and these only, do²⁸.

B. While the above cumulative evidence strongly speaks to Egyptian “cackle” being a N-stem, this does not imply that the verb might not have secondarily aligned on *II.red* in its inflectional behavior. That it actually did is suggested by short written stems (*ng*) of the subjunctive in two places (CT IV 311a, many witnesses²⁹; CT III 144c S2C, B2Bo³⁰) and of the passive in one other place (CT I 74b B1P). Inflectional alignment on *II.red* may have been partial rather than complete: in the afore mentioned CT IV 311a, one witness, M4C, has the long written stem (*ngg*), even though the context similarly suggests a subjunctive³¹. In the following, the hypothesis required for Schenkel’s line of argument is adopted, namely that *ngigi* had by the time of Coffin Texts fully aligned inflectionally on *II.red*. Under this hypothesis, the one passage that would provide evidence in support of the existence of a *sdm.n=f_y*, CT I 74b, is examined in further details.

The textual tradition of CT I 74b is complex. Only four out of eight witnesses have a short written stem, *ng^{DET}.n* (T1L, BH5C) or *ng.n* (T9C, T1C). Two other witnesses read passively, with a stem *ng^{DET}* (B1P) or *ngn^{DET}* (B4C). One witness has a long stem, in the present tense reading the text as it stands (*ngg^{DET}*), or perhaps to be emended into a past tense (*ngg^{DET}<.n>*) (B6C). The last witness, finally, has a construction that is unclear as the text stands, with a stem *ngn^{DET}* (B3Bo). This casts some

²¹ For the latter, N.J.C. Kouwenberg, 2004. “Assyrian light on the history of the N-stem”, in Jan Dercksen (ed.), *Assyria and Beyond: Studies presented to Mogens Trolle Larsen*, PIHANS 100 (Leiden: Nederlands Instituut voor het Nabije Oosten, 2004), 333–52.

²² Allen, *Inflection*, § 746; Wb. II 346.1 translates differently, apparently under the influence of *nk* “copulate”, as “den Leib der Frau befruchten”.

²³ P. London BM EA 10793, belonging to the HPA Pinedjem II (text: Irmtraut Munro, *Der Totenbuch-Papyrus des Hohenpriesters Pa-nedjem II*. (pLondon BM 10793/pCampbell), HAT 3 (Wiesbaden: Harrasowitz, 1996); reference drawn from TLA, WCN 89720.

²⁴ Rami van der Molen, *A Hieroglyphic Dictionary of Egyptian Coffin Texts*, PdÄ 15 (Leiden/Boston: Brill, 2000), 252.

²⁵ E.g., in older times, *n-ḥr-n-ḥr* “rejoice” (Pyr. § 1729b^N), alongside more common *n-ḥr-ḥr*; *n-ḥr-n-ḥr* (Pyr. § 181a^W), alongside more common *n-ḥr-ḥr*; see Elmar Edel, *Altägyptische Grammatik*, AnOr 34 & 39 (Rome: Pontificium Institutum Biblicum, 1955-1964), § 431. This is of course a significant morphological difference of Egyptian N-stems vis-à-vis Semitic ones.

²⁶ Reference drawn from TLA, WCN 89720.

²⁷ Quoted after Belegstellen II, 507.

²⁸ Examples and discussion in Vernus, *LingAeg* 17 (2009), 301–07.

²⁹ *Ng=i m smn sky=i nḥḥ mi nḥb-k³w* “I wish to cackle as a Nilegoose, I wish to make perish (?) eternity like Nehebka” (B9Cb, B3C, T1Cb, T3Be, M1N4); the interpretation as a subjunctive (rather than as a prospective or a *mrr=f*) is likely in view of the following *sky=i/sky N* (CT IV 311b).

³⁰ *Ng=i r=sn m smn <mi> šsmw* “I wish to cackle against them as a Nilegoose like Shesmu” (CT III 144c S2C, B2Bo). The interpretation as a subjunctive is likely in view of the following *p³=i* (CT III 144d). B1Bo and B2Be read with a past tense (*ngg.n N*).

³¹ This is again suggested by the next clause (CT IV 311b), with *sky N* in M4C, as in other witnesses.

general doubt on CT I 74b as the only passage to document the short written stem of the *sdm.n=f* of *ngg*.

Also to be noted is that short written stems are occasionally documented in contexts where long ones are expected. With another *II.red*, Pyr. § 2100b^{Nt} has *pš.n*, while N has *pšš.n*³². The environment is “emphatic”, implying a *sdm.n=f_x*, and thus a long written stem, under both the competing hypotheses alike: *pš.n* in Nt is then to be emended into *pš<š>.n*, as in N. Within Coffin Texts themselves, CT II 268/9e has been discussed as a case where what seems to be a short written stem is found in place of an expected long one in several witnesses: this could be either a non-standard spelling (a similar interpretive possibility is not given for *ng.n*), or a genuine misspelling, related to the overall complex textual tradition of the passage (1.7). The textual tradition of CT I 74b itself is no less complex, and in fact more.

Moreover, a short written form *ng.n* is in fact not absolutely unique to the passage under discussion, since it recurs in one witness of another passage, CT IV 23b Sq1Sq³³: *ng.n(=i) m smn* “I have cackled as a Nilegoose” (T1L and Sq6C have the long written stem, *ngg.n*). In CT IV 23b, unlike in CT I 74b, the environment is “emphatic”, implying a *sdm.n=f_x* under both competing hypotheses: the short written stem in Sq1Sq is therefore contrary to expectation. One might of course emend CT IV 23b Sq1Sq into *ng<g>.n(=i) m smn*, and probably should. Yet, this casts some further doubt on the value of the very same written form, *ng.n*, documented in one passage only, and in this passage in half of the witnesses only, to establish a distinct inflectional category of the *sdm.n=f*: if the reading *ng.n* in CT I 74b is to be considered primary, no less than half of the witnesses need to be emended, in various ways and for some of them on multiple levels simultaneously. Arguing directly for the primacy of such reading then presupposes that the hypothesis of a *sdm.n=f_y* is preliminarily established, at which point CT I 74b ceases to be independent evidence for that hypothesis. Any indication possibly to be derived from only half of the witnesses in CT I 74b, in what is clearly a highly complex passage, must therefore be considered extraordinarily brittle. The textual tradition of CT I 74b is now to be discussed in some more details (1.9).

1.9 Notes on the textual variation in CT I 74b and surroundings

In modeling aspects of the dynamics of textual tradition in CT I 74b, three issues are immediately apparent (see also the fuller synopsis below, (u)–(w)):

(t) Textual variation in CT I 74b:

- One witness presents what would appear to be a present tense construction of the passage, B6C *iw ngg n=k smn* (and similarly in the preceding clause *iw h3 n=k bik*).
- Two witnesses present what in view on the position of the determinative would appear to be a stem *ngn*, B4C *ngn^{DET}* (passive) and B3Bo *ngn^{DET}* (passive?).
- While five witnesses construe actively (with a *sdm.n=f* in T9C, T1L, BH5C, and T1C; with an apparent present tense construction in B6C), two, or perhaps three, other ones construe passively (B1P and B4C; perhaps also B3Bo).

A. The present tense construction in B6C, *iw ngg n=k smn*, to begin with this, is remarkable in view of the placement of the subject, after the verb: in this construction, a full noun subject is always placed before the verb ((*iw*) *N sdm=f*) and the correct construction would thus have been *iw smn ngg=f n=k*. The comment extends to the preceding clause, CT I 74a, which in B6C has the similarly incorrect *iw h3 n=k bik*.

An “obvious” emendation is then into two *sdm.n=f*’s (assuming haplography of the tense marker *-n-* with the following dative), under which the subjects *bik* and *smn* would fall into their right place: *iw h3<.n> n=k bik iw ngg<.n> n=k smn*. This would find some further support in a following clause, CT I 74e, which, with the same verb as in CT I 73d–74a, reads *iw h3.n n=k drti*. (An alternative emendation of CT I 73d–74b into *iw h3 n=k<in> bik iw ngg n=k <in> smn* is less likely: the emendation would be fairly heavy; more critically, the long written stem of *ngg* in a passive construction would still have to be emended further, into *ng<g>.*) This may not be the full story, however (below, D).

B. The stem *ngn* (written *ngn^{DET}*) in B3Bo and B4C is remarkable, as it is nowhere attested otherwise. Variation in the stem of *ngg* is documented in later times (thus *ngng* in one witness of BD 17) and for Coffin Texts in nominal derivatives, *ngng* and *ngngn*, “cackler” (1.8.A). The latter could suggest that a stem *ngn* might have existed as well. This remains insecure, however: Coffin Text

³² Allen, Inflection, § 767D; also noted by Uljas, LingAeg 18 (2010), 259.

³³ Uljas, LingAeg 18 (2010), 258; not noted by Schenkel.

evidence for the stems *ngng* and *ngngn* is from nominal derivatives, while evidence for verbal *ngng* is from much later times only.

Relevant to the issue is also CT III 130g, where one witness, T3Be, has a “stem” *nggn*, similarly unique (*nggn*^{DET}.*n=i*; S1C and TaBe have *ngg.n=i*, without determinative). In this case, the “stem” is demonstrably an artifact of textual tradition, as is implied by the determinative, G40 (the “p”-bird), unexpected with forms of *ngg* “cackle”. The immediately preceding clause (CT III 130f) reads *pḏ.n=i*: after the sign for *p*, this includes a sequence of signs <G40 n A1>. In T3Be, this graphic sequence is taken over into the next clause (CT III 130g) and added onto the sequence <n g g n> (*ngg.n* as correctly in S1C and T1Be): the overall result is a spelling <n g g n> + <G40 n A1>, which in transcription ends up as *nggn*^{DET}.*n=i*.

Nggn^{DET}, documented only in CT I 74b (B4C and B3Bo), may then similarly be an artifact of textual alteration: other witnesses do not have *ngn*, and several have a form *ng.n=f* (written either with or without determinative, *ng*^{DET}.*n=f* or *ng.n=f*); this suggests a “natural” emendation of B4C and B3Bo into *ng{n}*^{DET}.<n>³⁴. As it turns out, the preceding clause in one of these two witnesses (B3Bo) has just a *sḏm.n=f* (*iw ḥ3.n n=t bik*), apparently lending further support to such emendation. Things are hardly that simple, however, since the above does not easily account for the passive construction with agent (*in smn*) in CT I 74b B4C, and even less so for the exactly similar construction in CT I 74a B4C (*iw ḥ3 n=t in bik*).

C. The most salient textual issue in CT 74b and surroundings is the contrast between active and passive constructions, complexly distributed in different witnesses. This can only be appreciated within the broader context of the first part of Spell 24, from CT I 73d to CT I 74f. In the following synopsis of such variation, relevant verbal forms are boldfaced; passives are additionally underscored, and subjectless passives (i.e., passives from intransitives) are doubly underscored. Two main traditions are distinguished, (u)–(u′) and (v)–(v′); one witness has a mixed reading (w):

(u) CT I 74b in context, B1P:

<i>iw ḥ3 n=k in bik</i>	<i>iw <u>ng</u> n=k in smn</i>
<i>iw <u>d3</u> n=k c in ḏḥwti</i>	<i>iw <u>sh</u> n=k ḥpš n ḥftiw=k</i>
<i>iw <u>ḥ3</u> n=k in ḏrty</i>	<i>3st pw ḥn^c nbt-ḥwt</i>

(u′) Sim., B4C:

<i>iw <u>ḥ3</u> n=t in bik</i>	<i>iw <u>ngn</u> n=t in smn</i>
[...]	[...] <i>n ḥftiw=t</i>
<i>iw ḥ3^a n=t ḏrty</i>	<i>3st pw ḥn^c nbt-ḥwt</i>

a) sic, for *iw ḥ3<n> n=t ḏrty* qv *iw ḥ3 n=t <in> ḏrty*

(v) B6C:

<i>iw ḥ3<n?> n=k bik</i>	<i>iw <u>ngg<n?></u> n=k smn</i>
<i>iw <u>d3</u> n=k c in ḏḥwti</i>	<i>iw <u>sh</u> n=k ḥpš [n] ḥftiw=k</i>
<i>iw ḥ3.n n=k ḏrty</i>	<i>3st pw ḥn^c nbt-ḥwt</i>

(v′) Sim., T9C, T1L, BH5C, T1C:

<i>iw ḥ3.n n=k bik</i>	<i>iw <u>ng.n</u> n=k smn/bik</i>
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(w) Mixed, B3Bo:

<i>iw ḥ3.n n=t bik</i>	<i>iw <u>ngn</u> n=t m smn</i>
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The discussion is best begun with B1P and B6C, the only two witnesses to preserve a fuller version of the first part of the spell. As noted above (A), the text of CT I 73d–74b B6C (v) is ungrammatical as it stands and plausibly emended into two *sḏm.n=f*s under haplography of the tense marker to the following dative (*iw ḥ3<n> n=k bik iw ngg<n> n=k smn*). With or without this emendation, B6C presents an alternation between two active constructions (CT I 73d–74b), two passive ones (CT I 74c–d), and again an active one (CT I 74e). (T9C, T1L, BH5C, and T1C (v′), which preserve only CT I 73d–74b, fit into this tradition.) In B1P (u), by way of contrast, all events are passive. (B4C (u′) fits into this tradition for CT I 73d–74b; CT I 74e, which needs to be emended in one way or another, may fit into either traditions depending on how it is emended.) B3Bo (w), for its part, has a mixed version, first with an active construction (CT I 74a), then with a passive one (CT I 74b).

The alternation between active and passive constructions in B6C is not conditioned by the textually explicit presence of an agent: of the two passive constructions in this witness, one (CT I 74c) has a textually explicit agent, while the other one (CT I 74d) has not. Nor can the active-passive alternation in B6C be accounted for in broader discourse-functional terms: the various events do not differ in terms of the topicality, discourse-activation, or other properties of the referents involved. If, however, the two major witnesses, B1P and B6C are contrasted with each other, a remarkable pattern becomes apparent. Of the five passives in B1P, three are subjectless (i.e., derived from intransitives: *ḥ3*, *ng*, *ḥ3*), while the other two are passives derived from transitives (*d3^c*, *sh ḥpš*). Events that are presented as passive in both B6C and B1P are the ones derived from transitives, while events that are active in B6C correspond to the subjectless passives in B1P.

³⁴ This emendation is implicit in the count in Schenkel, “Prädikativens und abstrakt-relativisches *sḏm.n=f*”, 46, n. 13: see above, n. 12.

In going beyond the merely descriptive, the substantially different nature of the two types of passives is of relevance. In somewhat schematic terms, subjectless passives are non-prototypical, because passive voice is an Endpoint-oriented category: a passive derived from an intransitive, by definition, lacks an Endpoint. What is more, subjectless passives, untypical as they are in general, are even more untypical when combined with an explicit mention of the Agent: this is because Agent-expliciting constructions are mostly used in relation to issues to do with the relative topicality of the A and O participants, a dimension that cannot come to play with subjectless passives: by definition these are all about one core participant only, the agent itself (S). Significantly, many languages do not license subjectless passives at all or only marginally (e.g., several Semitic languages; by and large English); those languages that do license subjectless passives often license the combination of this construction with an explicit mention of the Agent only limitedly, if at all (e.g., German ?"Es wurde durch die Nilgans gegaggelt", hardly acceptable to a native speaker, nor generally deemed correct in grammars). These dimensions translate into differential ease of processing: while passives are generally more complex to process than actives, subjectless passives are relatively more complex to process than passives derived from transitives, and subjectless passives with explicit mention of the Agent may be most difficult to process of all.

Turning back to the textual issue at hand, that an active form would have been altered into a passive one is less likely than the reverse (compare e.g., Pyr. § 602a (PT 359), where the V-passive in T and N is made into an active *sdm.n=f* in P). That an active form from an intransitive event would have been altered into a subjectless passive is even less likely. That an active form would have been altered into a subjectless passive with an explicit mention of the Agent verges on the impossible. If, on the other hand, it is assumed that the sequence of passives, as in B1P, is original, the process of textual alteration is natural in terms of the different text frequencies of the various constructions involved and the differential ease of processing associated with these: active constructions in various witnesses of CT I 74a–e arise by simplification of grammar and style, precisely in those places where grammar is most complex. The active-passive alternation in B6C is explained in principled ways: the most complex passive constructions, the ones derived from intransitive verbs, are made active, while the less complex ones, the passives derived from transitive verbs, are left passive.

D. That the passive constructions in CT I 73d–74a are original and the active ones secondary is also independently suggested by the broader articulation of Spell 24. This falls in two parts, both introduced by an address to the deceased, *h3 wsir N pn* (CT I 73c and 75a, respectively). In the second part of the spell, documented in four witnesses (B1P, B4C, B6C, and T9C), all five events are passive in all witnesses. These passives are from transitive events, which explains why they stay passive in B6C (and T9C): as discussed above, in those witnesses that alter passive constructions (such as B6C), only subjectless passives are altered into active constructions.

Turning back to the beginning of the spell as documented in other witnesses, T9C, T1L, BH5C, and T1C align with B6C, adapting the subjectless passives to actives (unlike B6C, these witnesses display only the first two clauses) (β). B6C secondarily loses the tense marker *-n-* in the first two events, under haplography (γ). *Ngn^{DET}* in B3Bo and B4C is also a secondary alteration, possibly set in relation to an incomplete adaptation of the agent phrase in the first process of alteration (δ):

(x) Processes of textual alteration in CT I 73d–74f:

- (α) B1P: original reading, all events in the passive (*iw h3 n=k in bik iw ng n=k in smn iw d3 n=k c in dhwti iw sh n=k hps n hftiw=k iw h3 n=k in drty*).
- (β) T9C, T1L, BH5C, and T1C: adaptation of CT I 73d–74a (*h3i*) and CT I 74b (*ngg*), both subjectless passives in the original, to active constructions (> *iw h3.n n=k bik iw ng.n n=k smn/bik*).
- (γ) B6C: adaptation of subjectless passives, and of these only, into actives (> **iw h3<.n> n=k bik iw ngg<.n> n=k smn iw d3 n=k c in dhwty iw sh n=k hps [n] hftiw=k iw h3.n n=k drty*); secondarily, haplography of the tense marker *-n-* before dative with the first two of the series of events (> *iw h3 n=k bik iw ngg n=k smn*, ungrammatical).
- (δ) *Ngn^{DET}* in B3Bo and B4C: a secondary alteration, possibly in relation to an incomplete adaptation of the original Agent phrase in the first stage of the change (B3Bo > **iw h3.n n=t bik ng.n n=t m²/in² smn* > *iw ngn^{DET} n=t m smn*; B4C > **iw h3 n=t in bik iw ng.n n=t in smn* > *iw h3 n=t in bik iw ngn^{DET} n=t in smn*).

E. In view of the complexity of the textual tradition in CT I 74a–b, the reader may of course consider scenarios different from the above. What is clear, however, is that any such scenario must account for the alternation between passive and active constructions in B6C, as well as for its principled correlation with different types of pas-

sives in B1P. For this, and for other reasons exposed above, declaring the passives secondary to the *sḏm.n=f*'s seems difficult; whatever the details, some perhaps in need of further adjustment, *iw ng.n* in CT I 74b T9C, T1L, BH5C, and T1C is arguably secondary to a passive construction. In the passive, *II.red* have the short stem: the short written stem of the *sḏm.n=f* in CT I 74b T9C, T1L, BH5C, and T1C could therefore itself be a textual hang-over of the short written stem of the passive: in other words, it could well be textual in origin rather than grammatical in nature, by a process similar to the one by which the “stem” *ngn* in other witnesses could be as well.

If *iw ngg* in CT I 74b B6C comes from *iw ngg<.n>* (itself secondary to passive *iw ng*: (y)), B6C may even bear trace that the form of the *sḏm.n=f* of *ngg* after *iw* was in fact regular with the long written stem (correctly adapted in the textual tradition underlying this specific witness, before the tense marker was subsequently lost).

1.10 CT V 300b *iw nt̄n*

A. The last passage to be discussed, CT V 300b, reads *iw nt̄n* (four witnesses).³⁵ This, however, documents a short written stem of a *II.red* in a “non-emphatic” environment only if *nt̄* “fetter” is indeed a *II.red*. A verb *nt̄* is not entirely uncommon in broadly “religious” texts in New Kingdom or later times³⁶. In earlier times, nominal derivatives of various sorts are found, both with and without written reduplication of *t̄*; thus, in Coffin Texts, *nt̄w*, var. *nt̄tyw* “bonds”³⁷, but also *int̄*, *int̄*, var. fem. *int̄t̄*, *int̄t̄* “fetter”³⁸. Rare, but very remarkable, are nominal derivatives without initial *n*-³⁹: *t̄t̄* “Fesslerin” (Pyr. § 672b^T) “und vielleicht auch (nach Sethe) *t̄w* ‘Fessler (der Feinde)’” (Pyr. § 439a^{WT}). Nominal derivatives without initial *n*- strongly imply that *n* in *nt̄* is not the first root consonant, but a prefix⁴⁰; if so, *nt̄* could hardly be a *II.red* (**n-AA* ist not an attested type). That “*nt̄*” is not a *II.red* is also suggested by the form of the pseudoparticiple of that verb: (...) *wnn=sn sn̄.yw nt̄.yw* (...) “(...) that they be bound and fettered (...)” (Urk. I 305, 18). The pseudoparticiple of

II.red has a short written stem, without reduplication⁴¹. (Examples with the long written stem quoted by Edel are spurious⁴²; only one instance with a long stem has ever been spotted, in a faulty passage in Coffin Texts⁴³.)

In Coffin Texts themselves, a verb “fetter” is found in only two passages, the one under discussion (CT V 300b *iw nt̄n*) and one other one. The latter reads *n int̄<t(w)>=t̄* “You will not be fettered” (CT I 70c)⁴⁴. The form is here probably a prospective, as is suggested by the construction (*n sḏm=f* with future time-reference) and *n rd.t(w)* in the immediately following clause. If so, *int̄* cannot be a form of a *II.red*, since this would display written reduplication in the prospective. If, as is less likely, *n int̄<t(w)>=k* in CT I 70c were to be analyzed as a form of the subjunctive, the lack of written reduplication would be accounted for under an interpretation as a *II.red* (AvBB'v-: <AB>), yet the initial <i> could not be the marker of written inflection, since this would be prevented precisely by a form as AvBB'v-. However to be analyzed, therefore, “fetter” in CT I 70c is not a form of *nt̄*, but of a different stem, probably to be set as *int̄*. On what grounds the only other occurrence of a verb “fetter” in Coffin Texts, *iw nt̄n* in CT V 300b, should be taken to be an instance of a *II.red* then remains unclear. If the long written stem of the pseudoparticiple in Urk. I 305, 18 (above) is additionally taken into account, this is very unlikely.

⁴¹ For Pyramid Texts, Allen, Inflection, § 768 (NB: the one possible instance of a possible long written stem quoted by Allen, with a question mark, *qrr* in § 413b^{WT} (PT 274) is a relative *sḏm.n=f* (*qrrt.n* N)); for Old Egyptian texts more generally, further examples in Edel, Altägyptische Grammatik, § 578; for Middle Egyptian, e.g. Schenkel, Tübinger Einführung, § 7.3.2.c.

⁴² Edel, Altägyptische Grammatik, § 578, gives three examples. The first, presented as a 2ms pseudoparticiple of *wrr* “be great” (Pyr. § 877b^{PN}; PT 463), is in fact a nisba-derivative from *wrrt* “Great Crown” (recognized by James Allen, The Ancient Egyptian Pyramid Texts, Writings from the Ancient World 23 (Atlanta: Society of Biblical Literature, 2005), 122: this is implied by the overall construction of the clause with an initial independent pronoun, *twt wrrt m t̄-wr*). The second instance adduced by Edel is from a New Kingdom text (edited by Kurt Sethe, “Die beiden alten Lieder von der Trinkstätte in den Darstellungen des Luxorfestzuges”, ZÄS 64 (1929), 2). The third instance is Urk. I 305, 18 itself.

⁴³ CT IV 200/1a L3Li *wnn*, against 21 other witnesses with *wn*; just in the next clause, L3Li itself correctly has *wn*. (I thank Wolfgang Schenkel, personal communication, 7/2013, for drawing my attention to this, in his own words a “Kuriosum”).

⁴⁴ Thus B3Bo; sim. B1P, T1L *n int̄<t(w)>=k*; without haplography of the passive marker, but with a phonetic spelling of the negative word, T1C *n int̄.t(w)=k*; less correctly B6C as *n in<t>.<t(w)>=k*; B4C is garbled.

³⁵ Schenkel, “Prädikatives und abstrakt-relativisches *sḏm.n=f*”, 46, n. 14–16.

³⁶ Wb. II 367.2–8.

³⁷ Van der Molen, Dictionary, 259; 254.

³⁸ Van der Molen, Dictionary, 42.

³⁹ Edel, Altägyptische Grammatik, § 427, Anm.

⁴⁰ Sim. Edel, Altägyptische Grammatik, § 427, Anm, who in a more strongly assertive mode went on to conclude: “als *n*-Bildung erwiesen”.

B. At this point, one may wonder what the inflectional class of “fetter” actually is. The evidence is puzzling: based on nominal derivative suggesting that *n-* could be a prefix, not the first root consonant, one could be tempted by positing a *n*-Ai-Ai formation (*ntiti*). Another solution, elegantly synthesizing all other observations, would be to posit a verb *intt*, i.e. (initially?) a *III.red*⁴⁵. This would in particular account for the reduplicated form in the pseudoparticiple in Urk. I 305, 18, then to be read as (*i*)*ntt.yw*, with the non-representation of the initial *i-* easily accounted for as a phenomenon of *samdhi* (for reduplicated written forms of the pseudoparticiple of *III.red*, compare CT V 251a B2Bo *shdd* (alongside *shd* in S2C and P. Berl.); CT VII 212c P. Gard. III *hsdd.t(i)*⁴⁶; CT VIII 447ff B16C <*s*>*hdd*⁴⁷).

However, no definite conclusion is possible, given the small quantity of data, compounded with the possibility of changes in class-belonging over time. Such change is otherwise documented, thus in the now well-studied case of *hsd(d)* “go mouldry” (and the derived noun), originally a *3rad*, *hsd* (in Pyramid Texts), later a *III.red*, *hsdd*⁴⁸. As the contradictory interpretations made above (*ntiti*, a *N-stem*, or *intt*, a *III.red*) suggest, morphological change may indeed have affected this verb. Matters with (*i*)*nt(i)* were probably complex, beyond what the data support in terms of reconstruction.

1.11 Written forms of *II.red* in Coffin Texts: Summary

The written forms of *II.red* in Coffin Texts are compatible with the hypothesis of two forms of the *sdm.n=f* distinguished by the position of stress proposed by Schenkel. In particular, CT III 133b T3Be *n p[n]n^{DET}.n* (1.3.C) and *n 3mm.n.t(w)* in textual alternation to *n 3m.n.t(w)* CT I 397c (1.5.C) do not provide evidence remotely robust enough to contradict the hypothesis.

However, all of these written forms can also be interpreted differently, with equal likelihood in each case individually, and therefore as a collection⁴⁹:

(y) Alternative interpretations here proposed:

- long written stems (*išš.n*, *itt.n*, *nm^{DET}.n*, *wrr.n*, *ngg.n*): see 1.2;
- *II.red-ult.n* without determinative (*pn.n*, *rn.n*, *hn.n*): see 1.3.A;
- *II.red-ult.3*: *t^{3DET}.n*: see 1.4.E and the general discussion of *II.red-ult.3* in 1.4.A–D;
- *3m^{DET}.n*: see 1.5;
- *ng.n*: see 1.8–9;
- *nt.n*: see 1.10.

In several cases – long written stems; *II.red-ult.n* without determinative – the possibility of an alternative interpretation is a direct consequence of mapping out the implications of the two competing hypotheses explicitly: both hypotheses predict the same written forms.

In the case of *t^{3DET}.n* – a *II.red-ult.3* like *m33*, but written with a determinative – various scenarios have been discussed under which this written form could be interpreted as a *sdm.n=f_X*; in particular, the syllable-final position the second “aleph” would have had in a *sdm.n=f_X* could have led to a lack of representation in writing or a lack of articulation in speech. Similar scenarios could apply to *3m^{DET}.n*, if really from “predicative” environments; however, the constructional environments in which these forms occur are more likely to be “emphatic” than not. If so, these would document written forms of the type *3m^{DET}.n* for what must be *sdm.n=f_X*’s under both hypotheses alike, then also implying that one of the scenarios proposed for interpreting *3m^{DET}.n* as a *sdm.n=f_X* would have to apply; a similar comment would then extend to the structurally similar written form *t^{3DET}.n*.

Ngg was probably not a *II.red* in origin, but seems to have aligned on that class inflectionally by the times of CT; the one passage in which a short written form of this verb is found comes with such textual complexities that no firm indications can be derived from it. In addition, there are also very strong indications that *ng.n* is secondary to an originally passive construction, in which case the short written stem in *ng.n* could be a textual hang-over from the short written stem of the original passive.

In the case of *ntt*, finally, class-belonging is altogether insecure; various indications speak against this being a *II.red*.

⁴⁵ On the inflectional behavior of *III.red* (and *caus-II.red*) in the *sdm.n=f*, Schenkel, *Tübinger Einführung*, §7.3.1.1.1, Anm. 4; id., *LingAeg* 14 (2006), 65–66.

⁴⁶ Schenkel, *LingAeg* 14 (2006), 67, n. 37.

⁴⁷ Data kindly provided by Wolfgang Schenkel, p.c., 7/2013.

⁴⁸ Coffin Texts have both, which may reflect two different traditions, one harkening back more directly to Pyramid Texts, the other one more innovative. In details, Schenkel, *LingAeg* 14 (2006), 66–67.

⁴⁹ In the list below, determinatives are noted only when relevant to the discussion. <*Wrr r n*> (*wrr^r.n* or *wrr.n*) is not included in the list,

because it was not used to argue for the hypothesis in the first place (1.7). Also suppressed from the list are *m3.n* (1.4.A–B) and *n^{hh}.n* (1.8.A), which were already withdrawn by Schenkel himself.

2 *Ult.n non-II.red* in Coffin Texts

Ult.n non-II.red were discussed in Schenkel's proposal, not as primary evidence supporting the hypothesis, but as possibly providing a way to independently test that hypothesis in an inflectional class entirely unrelated to the *II.red*. In the material he adduces for discussion⁵⁰, the author initially observes that written forms of *ult.n non-II.red* seem to behave partly according to expectation under his hypothesis ("hypothesenkonform") and partly in ways contrary to expectation ("hypothesenwidrig"). In "predicative" environments, *ult.n non-II.red* have written forms with two *n*'s (<ABNn>), i.e., phrased in the author's terms "without haplography"⁵¹. This is interpreted as being in conformity to his hypothesis, since in the hypothesized *sdm.n=f_Y*, and only in this, the last root consonant *n* would be separated from the tense marker *-n-* by a stressed vowel (AvBN'vnnv-). In "emphatic" environments, written forms often also display two *n*'s. This is interpreted as contrary to his hypothesis, since in the *sdm.n=f_X* the last root consonant *n* would stand in direct contact with the tense marker *-n-* (AvB'vNnnv-) and should thus surface in written form only once⁵²:

- (z) Schenkel's initial interpretation of written forms of *ult.n non-II.red*:

"Predicative" envs.: "hypothesenkonform"

<ABNn> (regularly) *sdm.n=f_Y* (AvBN'vnnv-)

"Emphatic" envs.: "hypothesenwidrig"

<ABNn> (often) *sdm.n=f_X* (AvB'vNnnv-)

2.1 *Ult.n non-II.red* in "emphatic" environments

Under the above analysis of written forms, the long written stems of *ult.n non-II.red* in "emphatic" environments would be contrary, not only to Schenkel's "split *sdm.n=f* hypothesis", but also to the alternative "unitary *sdm.n=f* hypothesis". This is because both competing hypotheses similarly posit a *sdm.n=f_X* (CvC'vCnnv-) in "emphatic" environments (1.2), which with *ult.n* should then similarly surface with a short written stem (<ABn>, for AvB'vNnnv-). Since the existence of a *sdm.n=f_X* does not stand to dis-

pute (1.2.A), it is the interpretation of written forms that must be revised.

A. Schenkel's initial analysis is carried out under the assumption that written representation primarily targets the phonological sequence: if so, "haplography" is indeed to be expected. In view of the resulting contradiction, the underlying assumption must itself be questioned. If, on the other hand, a mixed, lexico-phonological representation is posited, a written form <ABNn> of the *sdm.n=f_X* is naturally explained: the first written *n* is integral to the representation of the verb as a lexical item, while the second stands for the inflectional affix (thus, schematically, <ABN-n>).

Such analysis – which is required on the afore mentioned logical grounds – is also natural when the sequence of signs, rather than the transcription, is considered. To begin with a straightforward example, in CT IV 181q G1T *dbn.n=i*, the sequence of signs is <d-b-n-DBN-n-i-A1>.⁵³ If the first *n* were left unwritten, *dbn* would appear as <d-b-DBN>. This would be a rather odd spelling for a word that is otherwise written either as <d-b-n-DBN> or as <DBN-n>⁵⁴. An incomplete complementation where the first and second root consonant would be privileged over the last would more generally be against Middle Egyptian orthographic standards. In the present case, the regular presence of <n>, a flat sign, is also because it naturally fits over or under <DBN>, also a flat one (over it in the fuller spelling, under it in the shorter one). The sequence of signs <d-b-n-DBN> is therefore a lexical representation, not reflecting inflection; the two *n*'s standing in contact with each other in the phonological sequence are represented twice in writing, because they belong to different levels of representation, one lexical, the other inflectional:

- (aa) CT IV 181q G1T *dbn.n=i* as a *sdm.n=f_X*⁵⁵:

<d-b-n-DBN>	– <n>
(lexical representation)	– (affix)
*/dvb'vn/	– */nv-/
	(haplography blocked)

In substantial ways, this is similar to the analysis subsequently developed by Schenkel himself, speaking of the

⁵⁰ Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*", 51–58.

⁵¹ Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*," 52–54.

⁵² Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*", 54–56.

⁵³ Adapting an Assyriological convention somewhat, capitalized "DBN" stands for the word-sign (here F46).

⁵⁴ Wb. V 436–37.

⁵⁵ Similar in principle are written forms with determinative, such as *fgn^{DET}.n=i* in CT III 121d S1Tü (also a *sdm.n=f_X*): see below, 2.2, (cc).

role of the determinative as signalling the morpheme boundary (stem-affix), itself a parameter preventing haplography⁵⁶.

At first perplexing alternations such as between *smn*^{DET.n} *N* and *smn*^{DET} *N* in CT V 228j (T1Cb and T1Ca, respectively)⁵⁷ can then also be accounted for. In T1Cb, the written representation is as just discussed, with <*s-mn-n-DET*> a logographic representation of the verb as a lexical item (*smn*ⁿ ^{DET}), followed by <*n*> standing for a representation of the inflectional affix *-n*. T1Ca is a rarer alternative, including the same lexical representation (also *smn*ⁿ ^{DET}), but within a phonologically-based representation of the overall word-form: in this case, haplography applies. (Technically, the haplography is not of the last root consonant, but of the tense marker itself, as the position of the determinative also visually expresses.) That a written form such as the one in T1Ca should be relatively less common is because the form is not distinctive with respect to the *sdm.n=f*, unlike the fuller form as in T1Cb.

B. In a previous section of the present paper, it was observed that the written forms of *II.red-ult.n* *pn.n*, *rn.n*, and *hn.n* could equally well be analyzed as representing the hypothesized *sdm.n=f_y* (<ANn> for AvNN'vn-) and the *sdm.n=f_x* (<ANn> for AvN'vNnv-). Such analysis, which includes haplography, is not at odds with the one just developed for *ult.n non-II.red*. A first observation is that *pnn*, *rnn*, and *hnn* are written without a determinative, while *fgn* and *smn* are with a determinative: in Schenkel's foot tracks, the determinative, only with *ult.n non-II.red* signals the morpheme boundary, often blocking haplography; in *dbn* written fully, the word-sign has similar effect. A complementary, in part equivalent, view is also the following: as *ult.n non-II.red* have one root consonant *n* only (by definition), this *n* is then an integral component of the logographic representation of the verb as a lexical item. In *II.red-ult.n*, by contrast, the second *n* is not an integral component of such lexical representation: as written forms such as the subjunctive demonstrative, only the first *n* is a necessary component of this representation.

⁵⁶ Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*", 57–58; see also, in a different context, id., LingAeg 14 (2006), 62: "Liegt zwischen zwei gleichen Konsonanten eine Morphemfuge, kann der Konsonant auch zweimal geschrieben werden".

⁵⁷ Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*", 55, and n. 74–75.

2.2 *Ult.n non-II.red* in "predicative" environments

The above analysis also implies reconsidering the interpretation of the long written stems of *ult.n* in "predicative" environments (<ABNn>). These are interpreted by Schenkel as evidence in support of his hypothesis. A written form <ABNn> would thereby stand for the hypothesized *sdm.n=f_y*, in which the last root consonant *n* would be separated from the tense marker *-n* by a stressed vowel (AvBN'vnnv-), and therefore not undergo haplography. The same written form, so Schenkel, could not stand for a *sdm.n=f_x* (AvB'vNnv-) because in this form the final root consonant *n* and the tense marker, also *-n*, stand in contact and would therefore undergo haplography.

However, in all cases except one (below), the spelling is with a determinative⁵⁸: *whn*^{DET.n} (2–6), *bhn*^{DET.n} (1–1),⁵⁹ *sbh*^{DET.n} (1–2)⁶⁰, *smn*^{DET.n} (1–1), *ssn*^{DET.n} (3–3), *ṭwn*^{DET.n} (1–6), and *dbn*^{DET.n} (6–7/8²). In such spellings, the last root consonant *n* is an integral part of the representation of the verb as a lexical item, separated from the inflectional affix by a determinative. The last root consonant *n* and the tense marker *n* thus belong to two different levels of written representation; haplography is blocked, and written forms such as the above could stand for a *sdm.n=f_x*:

- (bb) CT IV 159e Sq6C *whn*^{DET.n}, possibly interpreted as a *sdm.n=f_x*:
- | | |
|--------------------------|-----------------------|
| <w-h-n-DET> | – <n> |
| (lexical representation) | – (affix) |
| */wvh'vn/ | – */nv-/ |
| | (haplography blocked) |

This possibility is given because the very same analysis had to be made for exactly similar written forms that under both hypotheses alike must be analyzed as *sdm.n=f_x*

⁵⁸ Data from Schenkel, "Prädikatives und abstrakt-relativisches *sdm.n=f*", 52–53, n. 49–68.

⁵⁹ CT VII 19r T3C *bhn*^{DET.n(=i)} *n=f*, with an *Umstellung* of the tense marker <n> and the determinative (thus technically *bhn*{*n*}^{DET.<n>} (=i) *n=f*): the *Umstellung* is for visual arrangement, fitting three horizontal narrow signs (the two *n*'s and the hoe U7) against the narrow vertical sign *h*. In addition, the set group *hnn* (with all four signs, encountered in the spelling for *hnn* 'hoe'), could have played a role here.

⁶⁰ CT IV 105 S2P *sbh*^{DET.<n>} *n=i*, with haplography of the tense marker before the pronominal dative; S1C *sbh*{*n*}^{DET.<n>} *n=i*, a similar phenomenon, probably with an additional confusion.

based on the “emphatic” environments in which they occur (2.1.A):

- (cc) CT III 121d S1Tü *fgn*^{DET}.*n*, necessarily as a *sdm.n=f_x*:
- | | |
|--------------------------|-----------------------|
| < <i>f-g-n-DET</i> > | – < <i>n</i> > |
| (lexical representation) | – (affix) |
| <i>*/fvg˘vn/</i> | – <i>*/nv-/</i> |
| | (haplography blocked) |

As regards the single case written without determinative, CT II 202d B1L *ṭwn.n*, this is one of seven witnesses where all six others have *ṭwn*^{DET}.*n*: the omission of the determinative in B1L does not therefore affect the above analysis⁶¹. In one case, finally, the tense marker is left out, CT I 401a T3C *whn*^{DET}.*n*, standing against five witnesses with the tense marker written, *whn*^{DET}.*n*⁶²: the alternation is similar to the one between *smn*^{DET}.*n* *N* and *smn*^{DET} *N* in CT V 228j (T1Cb and T1Ca, respectively), in which the “emphatic” environment imposes an analysis as *sdm.n=f_x* under both competing hypotheses alike (2.1.A, *fine*).

The written forms of *ult.n non-II.red* in “predicative” environments can thus be analyzed equally well as *sdm.n=f_y*’s or as *sdm.n=f_x*’s. Both analyses are just as likely, and these written forms do not provide evidence in support of the “split *sdm.n=f* hypothesis”: they are neutral as to which of the two competing hypotheses is correct.

2.3 *Ult.n non-II.red*: Summary

Written forms of the *sdm.n=f* of *ult.n* are in most cases with both the final root consonant and the tense marker written, i.e. “without haplography” (<ABNn>). In Schenkel’s initial analysis, these written forms would be “hypothesenwidrig” in “emphatic” environments (AvB˘vNnv-: haplography expected), while they would be “hypothesenkonform” in “predicative” ones (AvBN˘vnv-).

In the analysis made above, as in Schenkel’s subsequent discussion, forms in “emphatic” environments without haplography (<ABNn>) are easily explained when determinatives or word-signs are taken into account: thus *dbn.n*, written <*d-b-n-DBN-n*> as consisting in a representation of the verb as a lexical item (<*d-b-n-DBN*>) followed by the tense marker <*n*>; similarly *fgn*^{DET}.*n* as <*f-g-n-DET*> followed by <*n*>. This analysis, which comes naturally when the visual makeup of writ-

ten forms is taken into account, is required because under both competing hypotheses alike the same form, a *sdm.n=f_x*, is predicted in “emphatic” environments.

The possibility of such analysis then extends to “predicative” environments, in which the same written forms <ABNn> are found. These, which all come with determinatives (e.g. *whn*^{DET}.*n*), can of course be analyzed as *sdm.n=f_y*’s, as proposed by Schenkel; they can equally well be analyzed as *sdm.n=f_x*’s.

In sum, written forms <ABNn> of *ult.n* are not “hypothesenwidrig” in “emphatic environments”, as suggested in Schenkel’s initial analysis, nor are they “hypothesenkonform” in “predicative” ones: in both environments, they are neutral as to which of the two competing hypotheses, the “split” or the “unitary” one, is correct.

3 Forms of *wnn* in the Coffin Texts

(It is my great pleasure to acknowledge that the following section is entirely the product of an e-mail exchange with Wolfgang Schenkel in July 2013. Wolfgang Schenkel provided the explanation for the short form *wn* (<*wn*ⁿ>) and one scenario by which the longer form *wn.n* (<*wn*ⁿ *n*>) could be accounted for; I am responsible for the alternative scenario accounting for the longer form in different ways. Wolfgang Schenkel most kindly agreed that the result of this discussion be included in the present study for publication.)

Written forms of the *sdm.n=f* of *wnn* display a clear contrast, which correlates with “abstract-relative” and “predicative” environments. At first sight, written forms of the *sdm.n=f* of *wnn* would thus seem to finally provide direct evidence for distinguishing two forms of the *sdm.n=f*. The data are as follows⁶³:

- (dd) Written forms of the *sdm.n=f* of *wnn* in Coffin Texts:
- wn* (<*wn*ⁿ>), in “emphatic” environments:
CT IV 94o; 94t; 95c; 95g (all B5C); VII 105q (S5C)⁶⁴;
 - wn.n* (<*wn*ⁿ *n*>), in “predicative” environments:
after *iw*: CT VII 122n (T1NY);
after negative *n*: CT IV 18f (B1Bo, B2Be); VII 237f; 237h (both P. Gard. II); CT VII 501c (B1P, B5C, B4L)⁶⁵.

This difference between these two written forms of the *sdm.n=f* of *wnn* cannot be explained away in terms of

⁶¹ In details, the spelling is <*ṭ-wn-n-n*>, with the first *n* the regular phonetic complement of *wn* (thus *ṭwn*ⁿ.*n*): the group <*ṭ-wn-n*> thereby similarly functions as a representation of the word as a lexical item.

⁶² S1C, B1Bo, B1C, B1P; B2L has *whn*^{DET}{*n*}.*n*.

⁶³ Schenkel, “Prädikatives und abstrakt-relativisches *sdm.n=f*”, 48.

⁶⁴ Also outside Coffin Texts e.g., Sinai 90, 8 and 13 (Herwerre); RILN 73, 6 (Antefiker’s Girgawi Inscription); Hatnub 22, 2; etc.

⁶⁵ Also, under justified emendation, CT VII 293c (B1L, B2L, B2P).

complementation, since the complementation of *wn* (E34) by *n* is regular⁶⁶; the written forms $\langle wn\ n \rangle$ and $\langle wn\ n\ n \rangle$ must therefore be read as *wn* ($\langle wn^n \rangle$) and *wn.n* ($\langle wn^n\ n \rangle$), respectively. Other *II.red-ult.n* contrast a form with two *n*'s (when no determinative is written) with one with three *n*'s (when a determinative is written, only documented in “emphatic” environments) (1.3). *Wnn* differs from these in contrasting a form with two *n*'s with a very short one with one *n* only.

3.1 The very short form *wn* ($\langle wn^n \rangle$)

The very short form *wn* ($\langle wn^n \rangle$) is found in “emphatic” environments and thus stands for a *sdm.n=f_X* under either of the competing hypotheses. With other *II.red-ult.n*, a *sdm.n=f_X* written without determinative comes with two *n*'s in written form (AvN'vNnv-, thus $\langle ANn \rangle$: 1.3.A). Irrespective of which of the competing hypotheses is correct, the very short form *wn*, only with this one verb, must therefore be accounted for in some way. Wolfgang Schenkel⁶⁷ proposes the following scenario, with a shortening of the pre-tonic syllable, occurring in the case of *wnn* as a high-frequency verb which also has grammatical functions:

- (ee) *Wn* ($\langle wn^n \rangle$) (a *sdm.n=f_X* under either hypothesis):
 *WvN'vNnv- > W(vN)'vNnv-
 (contrasting with other verbs: AvN'vNnv-, $\langle ANn \rangle$)

I fully side with this frequency-based, and thereby usage-based, explanation. Besides its inherent likelihood, there simply seems to be no other way to account for the short written form *wn* as this contrasts with the not so short written form of other *II.red-ult.n* in similar environments.

3.2 *Wn.n* ($\langle wn^n\ n \rangle$) in contrast to *wn* ($\langle wn^n \rangle$)

A. In accounting for the form *wn.n* ($\langle wn^n\ n \rangle$) found after *iw* and negative *n*, Wolfgang Schenkel proposes that the shortening observed in the *sdm.n=f_X* did not occur after *iw* and *n* because the form had a different syllable structure, in other words was not a *sdm.n=f_X*:

- (ff) *Wn.n* ($\langle wn^n\ n \rangle$) in Schenkel's proposal:
 WvNN'vNnv- (no shortening)

Unlike in the *sdm.n=f_X*, the first syllable would thus have been “protected” by the geminated *n* that followed. The reasoning is impeccable and things may have been as suggested by Schenkel. If so, the longer written form of the *sdm.n=f* of *wnn* would imply the existence of a *sdm.n=f_Y*, because this is the differently stressed form needed under this scenario.

However, this is not the only possibility to account for the form *wn.n* found after *iw* and *n*. I here propose an alternative account which is based, quite literally, on the observation that *wn.n* is found after *iw* and *n*. While prosodic phenomena are hardly ever visible in written form, it is reasonable to assume that such phenomena existed in Earlier Egyptian, as they do in other languages; in fact, at least one alternation in the written phenomenology of the *sdm.n=f* itself is arguably related to precisely such phenomena⁶⁸. In the scenario proposed below, a phenomenon of samdhi is posited, by which the pre-tonic open syllable would have been reduced after *iw* (**/jv/*) and *n* (**/n(v)/*)⁶⁹.

- (gg) *Wn.n* ($\langle wn^n\ n \rangle$), an alternative proposal:
 jv + *WvN'vNnv- > jv-W\$N'vNnv-
 n(v) + *WvN'vNnv- > nv-W\$N'vNnv-

⁶⁸ As noted by Hans Jakob Polotsky, *Les transpositions du verbe en égyptien classique*, Israel Oriental Studies 6 (Tel Aviv 1976), 23, n. 40, a few early Middle Egyptian texts make a distinction between a stem of *rdi* with *r-* in “nominal” environments (*rd.n=f*) and a stem without *r-* in “circumstantial” ones (*d.n=f*). In those texts that make the distinction, forms with *r-* are in sentence-initial position (in the “emphatic construction”) or after the negation *n* (*n rd.n=f*); forms without *r-* are after *iw* (*iw d.n=f*) or otherwise in positions that are not sentence-initial (thus in dependent clauses, in which the verb is clause-initial, but not sentence-initial). The same verb *rdi* displays a similar alternation of stems with and without *r-* in forms of the *sdm=f*: for instance, the Old Egyptian “past tense” *sdm=f*, which is always in sentence-initial position or after the negation *n*, has a stem with *r-* (*rd N*; *n rd=f*); the “aorist” *sdm=f*, which is used after *iw*, a noun phrase, or otherwise in a position that is not sentence-initial, has a stem without *r-* (*iw d=f*; *NP d=f*; dependent *d=f*). The correlation of stems with and without *r-* is exactly the same as in the *sdm.n=f*, an entirely unrelated category. Rather than implying two forms of the *sdm.n=f*, as has been assumed, this occasional contrast in stems of *rdi* with and without *r-* is probably best interpreted as reflecting a phenomenon to do with prosody.

⁶⁹ For the general principle, compare (word-internally) e.g., Akkadian **paris-áku* > *pars-áku*.

⁶⁶ According to Wolfgang Schenkel (personal communication, 7/2013), the Coffin Texts do not include a single clear case of uncomplemented *wn*, out of roughly a thousand instances in this corpus.

⁶⁷ Personal communication, 7/2013.

B. The two scenarios may now be presented alongside each other and thereby contrasted as to their implications:

(hh) Schenkel's overall scenario:

wn (<*wn*ⁿ>) in "emphatic" environments

*WvN'vNnv- > W(vN)'vNnv- (*sdm.n=f_X*)

wn.n (<*wn*ⁿ-*n*>) after *iw* and negative *n*:

WvNN'vnnv- (*sdm.n=f_Y*)

(ii) An alternative scenario:

wn (<*wn*ⁿ>) in "emphatic" environments

*WvN'vNnv- > W(vN)'vNnv- (*sdm.n=f_X*)

wn.n (<*wn*ⁿ-*n*>) after *iw* and negative *n*:

jv + *WvN'vNnv- > jv-W\$N'vNnv- (*sdm.n=f_X*)

n(v) + *WvN'vNnv- > nv-W\$N'vNnv-

Both scenarios account for the two explananda raised by the written data: (α) the extremely short form of the *sdm.n=f* of *wnn* in "emphatic" environments; (β) the fact that after *iw* and negative *n* the *sdm.n=f* of *wnn* is not as extremely short. The first scenario implies the existence of a *sdm.n=f_Y*, the second does not. Both are equally likely.

Conclusion

It has been argued in the present paper that written forms of *II.red* in Coffin Texts do not provide evidence in support of the "split *sdm.n=f* hypothesis". These forms are consistent with Schenkel's analysis, positing two forms of the *sdm.n=f* distinguished by the position of stress; they are similarly consistent with an interpretation

such as the one here outlined, assuming only one form of the *sdm.n=f* (1). Written forms of *ult.n non-II.red* – which were not used as primary evidence in Schenkel's proposal – are similarly consistent with either hypothesis. It was argued that these written forms target various levels of representation, lexical and phonological, and thus behave in more principled ways than initially assumed (2). Written forms of *wnn*, a high-frequency verb, afford a case of their own: with this verb only, a clear contrast between two distinct written forms is observed, distributed in principled ways over different environments. Yet again, however, the data are consistently interpreted under either hypothesis alike (3). Early New Kingdom forms of *II.red*, briefly touched upon, may be relevant to the issue, but do not in the current stage of study support definite conclusions in any direction either (1.6).

It is therefore submitted that the hypothesis of two forms of the *sdm.n=f* distinguished by the position of stress is not supported by the Coffin Text evidence based on which it was proposed. Evidence pro or contra the existence of two such forms of the *sdm.n=f* should be sought outside Coffin Texts.

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